

Appl. No. 09/741,272  
 Atty. Docket No. 8371  
 Response dated March 19, 2004  
 Reply to Office Action of January 7, 2004  
 Customer No. 27752

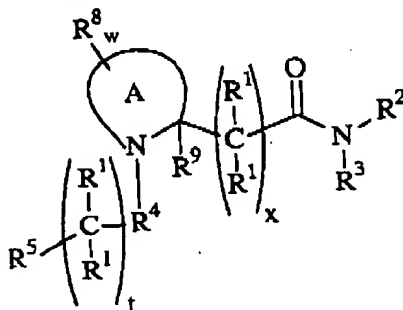
### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### Listing of Claims:

Claims 1 - 31(canceled).

Claim 32 (Previously presented) A compound having the structure:



or an optical isomer, diastereomer, enantiomer, pharmaceutically-acceptable salt, wherein:

- (a) w is 0 to 6, x is 0 to 10, and t is 0 to 6;
- (b) A is a substituted heterocyclic group having 4 to 9 members;
- (c) R<sup>1</sup> is selected from the group consisting of a hydrogen atom, a hydroxy group, a hydrocarbon group, a substituted hydrocarbon group, a heterogeneous group, a substituted heterogeneous group, a carbocyclic group, a substituted carbocyclic group, a heterocyclic group, a substituted heterocyclic group, an aromatic group, a substituted aromatic group, a heteroaromatic group, and a substituted heteroaromatic group;
- (d) R<sup>2</sup> and R<sup>3</sup> are bonded together to form a substituted piperidyl group;
- (e) R<sup>4</sup> is selected from the group consisting of -CH(R<sup>1</sup>)-;
- (f) R<sup>5</sup> is selected from the group consisting of -NR<sup>6</sup>(R<sup>7</sup>)- and -O<sub>r</sub>R<sup>6</sup>-; wherein r is equal to 1;

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- (g)  $R^6$  is selected from the group consisting of a hydrocarbon group, a substituted hydrocarbon group, a heterogenous group, a substituted heterogeneous group, a carbocyclic group, a substituted carbocyclic group, a heterocyclic group, a substituted heterocyclic group, an aromatic group, a substituted aromatic group, a heteroaromatic group, and a substituted heteroaromatic group;
- (h)  $R^7$  is selected from the group consisting of a hydrogen atom and  $R^6$ ;
- (i)  $R^8$  is selected from the group consisting of a hydrocarbon group, a substituted hydrocarbon group, a heterogenous group, a substituted heterogeneous group, a carbocyclic group, a substituted carbocyclic group, a heterocyclic group, a substituted heterocyclic group, an aromatic group, a substituted aromatic group, and a substituted heteroaromatic group; and,
- (j)  $R^9$  is selected from the group consisting of a hydrogen atom or a hydrocarbon group.

33. (Canceled)

34. (Canceled)

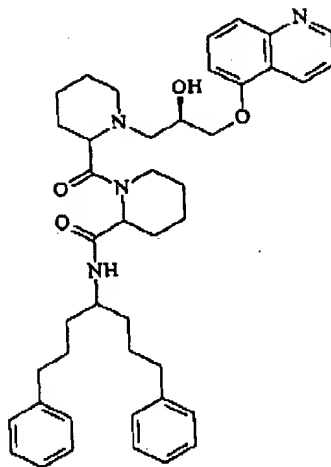
35. (Canceled)

36. (Canceled)

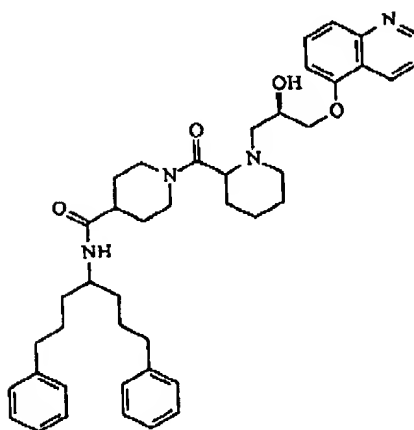
37. (Previously presented) A compound having the formula:

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i)



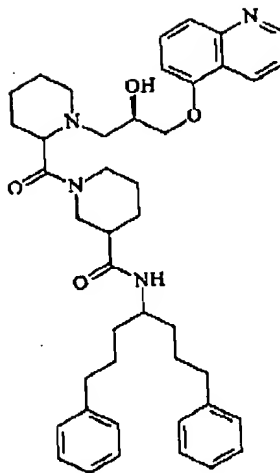
ii)



; or

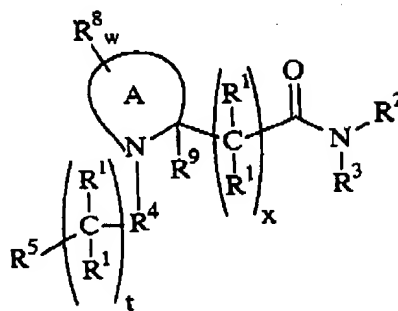
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iii)



38. (Previously presented) A composition comprising:

- a) one or more compounds having the formula:



or an optical isomer, diastereomer, enantiomer, pharmaceutically-acceptable salt,  
 wherein:

- (a) w is 0 to 6, x is 0 to 10, and t is 0 to 6;  
 (b) A is a substituted heterocyclic group having 4 to 9 members;

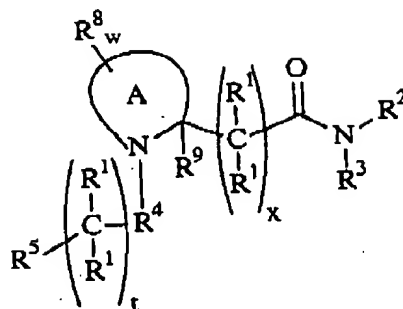
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- (c)  $R^1$  is selected from the group consisting of a hydrogen atom, a hydroxy group, a hydrocarbon group, a substituted hydrocarbon group, a heterogeneous group, a substituted heterogeneous group, a carbocyclic group, a substituted carbocyclic group, a heterocyclic group, a substituted heterocyclic group, an aromatic group, a substituted aromatic group, a heteroaromatic group, and a substituted heteroaromatic group;
  - (d)  $R^2$  and  $R^3$  are bonded together to form a substituted piperidyl group;
  - (e)  $R^4$  is selected from the group consisting of  $-\text{CH}(\text{R}^1)-$ ;
  - (f)  $R^5$  is selected from the group consisting of  $-\text{NR}^6(\text{R}^7)-$  and  $-\text{O}_r\text{R}^6-$ , wherein  $r$  is equal to 1;
  - (g)  $R^6$  is selected from the group consisting of a hydrocarbon group, a substituted hydrocarbon group, a heterogeneous group, a substituted heterogeneous group, a carbocyclic group, a substituted carbocyclic group, a heterocyclic group, a substituted heterocyclic group, an aromatic group, a substituted aromatic group, a heteroaromatic group, and a substituted heteroaromatic group;
  - (h)  $R^7$  is selected from the group consisting of a hydrogen atom and  $R^6$ ;
  - (i)  $R^8$  is selected from the group consisting of a hydrocarbon group, a substituted hydrocarbon group, a heterogeneous group, a substituted heterogeneous group, a carbocyclic group, a substituted carbocyclic group, a heterocyclic group, a substituted heterocyclic group, an aromatic group, a substituted aromatic group, and a substituted heteroaromatic group; and,
  - (j)  $R^9$  is selected from the group consisting of a hydrogen atom or a hydrocarbon group; and,
- b) a pharmaceutically acceptable carrier.

39. (Previously presented) A method for treating multidrug resistance, said method comprising the step of administering to a human or mammal an effective amount of a composition comprising:

- a) one or more compounds having the formula:

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or an optical isomer, diastereomer, enantiomer, pharmaceutically-acceptable salt thereof, wherein:

- (a)  $w$  is 0 to 6,  $x$  is 0 to 10, and  $t$  is 0 to 6;
- (b)  $A$  is a substituted heterocyclic group having 4 to 9 members;
- (c)  $R^1$  is selected from the group consisting of a hydrogen atom, a hydroxy group, a hydrocarbon group, a substituted hydrocarbon group, a heterogeneous group, a substituted heterogeneous group, a carbocyclic group, a substituted carbocyclic group, a heterocyclic group, a substituted heterocyclic group, an aromatic group, a substituted aromatic group, a heteroaromatic group, and a substituted heteroaromatic group;
- (d)  $R^2$  and  $R^3$  are bonded together to form a substituted piperidyl group;
- (e)  $R^4$  is selected from the group consisting of  $-\text{CH}(\text{R}^1)-$ ;
- (f)  $R^5$  is selected from the group consisting of  $-\text{NR}^6(\text{R}^7)-$  and  $-\text{O}_r\text{R}^6-$ , wherein  $r$  is equal to 1;
- (g)  $R^6$  is selected from the group consisting of a hydrocarbon group, a substituted hydrocarbon group, a heterogeneous group, a substituted heterogeneous group, a carbocyclic group, a substituted carbocyclic group, a heterocyclic group, a substituted heterocyclic group, an aromatic group, a substituted aromatic group, a heteroaromatic group, and a substituted heteroaromatic group;
- (h)  $R^7$  is selected from the group consisting of a hydrogen atom and  $\text{R}^6$ ;
- (i)  $R^8$  is selected from the group consisting of a hydrocarbon group, a substituted hydrocarbon group, a heterogeneous group, a substituted heterogeneous group, a carbocyclic group, a substituted carbocyclic group, a

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- heterocyclic group, a substituted heterocyclic group, an aromatic group, a substituted aromatic group, and a substituted heteroaromatic group;
- (j) R<sup>9</sup> is selected from the group consisting of a hydrogen atom or a hydrocarbon group; and,
- b) a pharmaceutically acceptable carrier.